

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
15 December 2005 (15.12.2005)

PCT

(10) International Publication Number  
WO 2005/118061 A1

(51) International Patent Classification<sup>7</sup>: A61N 1/32, A61B 5/053

(21) International Application Number: PCT/GB2004/004552

(22) International Filing Date: 28 October 2004 (28.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 0412070.5 28 May 2004 (28.05.2004) GB

(71) Applicant (for all designated States except US): EU-MEDIC LIMITED [GB/GB]; 3 Charnham Lane, Hungerford, Berkshire RG17 0EY (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): COLTHURST, James [GB/GB]; Eumedic Limited, 3 Charnham Lane, Hungerford, Berkshire, RG17 0EY (GB).

(74) Agents: KILBURN & STRODE et al.; 20 Red Lion Street, London WC1R 4PJ (GB).

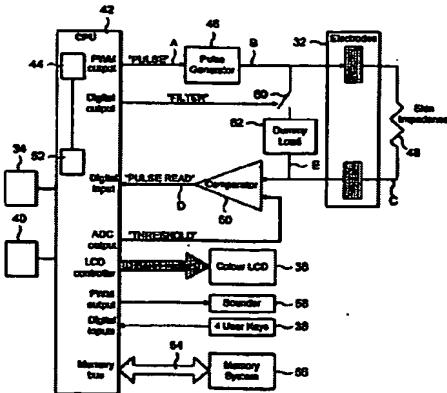
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DB, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KR, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TREATMENT APPARATUS FOR APPLYING ELECTRICAL IMPULSES TO THE BODY OF A PATIENT



(57) **Abstract:** The present invention provides a treatment device (10) for applying electrical impulses to a living body through the skin, for treating a variety of clinical conditions. The device comprises a pair of electrodes (32) for contact with the skin, and a waveform generator (46) for repeatedly generating an AC waveform for applying electrical impulses through the electrodes to the skin. A detector (50) detects changes in the skin impedance and generates detector output signals representing the skin impedance. Means (52) responsive to the detector output signals for monitor the responsivity of the skin, and indicator means (36, 58) activated by the monitoring means generate a first indication when a predetermined level of responsivity is reached and a second indication when a pre-determined treatment has been administered.

WO 2005/118061 A1